REMARKS

Claims 23-24 have been canceled. Claim 26 has been amended to reflect the correct claim dependency. Claims 21-22 and 25-27 remain pending in the present application.

In the office action of July 18, 2003, the following actions were taken:

- (1) claim 26 was objected to based on an informality; and
- (2) claims 21-27 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,997,622 (Weber) as evidenced by U.S. Pat. No. 5,605,750 (Romano).

Applicants have amended the claims by canceling claims 23 and 24. The remaining specific species are believed to be novel and nonobvious over the prior art of record, as will be described in more detail below.

CLAIM OBJECTION

Claim 26 has been amended to depend from claim 25. See page 18, lines 8-12 for support. The Applicant appreciates the notification of this informality.

REJECTIONS OF CLAIMS 21-27 UNDER 35 U.S.C. 102

Claims 23 and 24 have been cancelled, and the rejections thereof are considered moot. Further, the remaining claims 21-22 and 25-27 are considered novel over the references cited for the reasons discussed below. Applicant respectfully requests that the rejection of the remaining claims be withdrawn.

Discussion of Pertinent Case Law

The law clearly indicates that in order to hold a reference as anticipating under section 102(b), the reference must disclose each and every element of the claimed

invention. However, it is also established case law that not every reference which seems to disclose a claimed invention is a proper reference under §102. Specifically, the court has stated that "the true test of any prior art relied on to show or suggest that a chemical compound is old, is whether the prior art is such as to place the disclosed 'compound' in the possession of the public." *In re Brown*, 51 C.C.P.A. 1254, 1259 (CCPA 1964). The same court further stated that "the description must place the invention in the possession of the public as fully as if the art or instrument itself had been practically and publicly employed. In order to accomplish this, it must be so particular and definite that from it alone, without experiment or the exertion of his own inventive skill, any person versed in the art to which it appertains could construct and use it." *Id.* at 1260.

These statements stem, at least in part, from the fact that a non-enabled reference cannot serve as the basis for a rejection under 35 U.S.C. §102. On this point, section 2121.01 of the MPEP states:

In determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains an 'enabling disclosure'...." In re Hoeksema, 399 F.2d 269, 158 U.S.P.Q. 596 (CCPA 1968). A reference contains an "enabling disclosure" if the public was in possession of the claimed invention before the date of invention. "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his [or her] own knowledge to make the claimed invention." In re Donohue, 766 F.2d 531, 226 U.S.P.Q. 619 (Fed. Cir. 1985).

Further, the Federal Circuit has stated that the "test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." *In re Wands*, 858 F.2d 731, 8 U.S.P.Q.2d 1400 (Fed. Cir. 1988).

Importantly, it is well established that a <u>mere recitation of a long list of</u>

<u>chemical moieties</u> for use in a general genus, <u>does not constitute an enablement</u> of

each of the possible chemical structures. Specifically, the Federal Circuit has stated:

Clearly, however, just because a moiety is listed as one possible choice for one position does not mean there is *ipsis verbis* support for every species or subgenus that chooses that moiety. Were this the case, a "laundry list" disclosure of every possible moiety for every possible position would constitute a written description of every species in the genus. *This cannot be* because such a disclosure would not "reasonably lead" those skilled in the art to any particular species. *Fujikawa v. Wattanasin*, 93 F.3d 1559,1571, 39 U.S.P.Q.2d 1895 (Fed. Cir. 1996) (emphasis added).

This case involved a markedly similar situation as found in the present invention. In fact, in Fujikawa, a generalized genus was identified using a generic structure having substituents groups R0, R1, R2, R3, R4 and R5. The specification identified several broad categories of suitable groups and then identified a number of preferred groups. *Id.* at 1570. Essentially, the court held that such a "laundry list" was insufficient to provide an enabling disclosure for specific compounds which were assembled by picking and choosing various R groups.

In an earlier case, the CCPA provided an appropriate analogy in chemical cases such as the present invention. The court analogized a genus and corresponding species to a forest and its trees.

It is an old custom in the woods to mark trails by making blaze marks on the trees. It is no help in finding a trail... to be confronted simply by a large number of unmarked trees. Appellants are pointing to trees. We are looking for blaze marks which single out particular trees. We see none. *In re Ruschig*, 54 C.C.P.A. 1551, 379 F.2d 990, 994-95, 154 U.S.P.Q. (BNA) 118, 122 (CCPA 1967).

In the absence of such blaze marks, simply describing a large genus of compounds is not sufficient to satisfy the written description requirement as to particular species or sub-genuses. 93 F.3d at 1571. The court in Ruschig continued to further emphasize this point, stating:

Specific claims to single compounds require reasonably specific supporting disclosure and while we agree with the appellants, that naming is not essential, something more than the disclosure of a class of 1000, or 100, or even 48, compounds is required. Surely, given time, a chemist could name (especially with the aid of a computer) all of the half million compounds within the scope of the broadest claim, which claim is supported by the broad disclosure. This does not constitute support for each compound when separately claimed. 54 C.C.P.A. at 1556.

With this background in mind, the Applicant now reviews the cited reference and discusses each rejection in more detail below.

Discussion of Rejections in Light of the Case Law

The Examiner has asserted that the structure of claim 21 and 22 is disclosed in Weber. The groups identified by the Examiner for positions Z, X1, and X2 result in a chemical compound which is structurally similar to, but distinct from that claimed. Specifically, if X2 is aryl, the disclosed compound has the aryl adjacent to the chloro group (X1). In contrast, the present invention claims a phenyl which is directly opposite (para to) the nitrogen and three carbons removed from the chloro group. These two structures are clearly not the same. It is known in the chemical arts that a difference in position of a substituent group can dramatically change the properties of a compound. As Weber does not even arguable disclose the structure claimed, i.e. different position of moiety, Applicants respectfully request that the rejection of claims 21 and 22 be withdrawn.

The Examiner has asserted that Weber discloses the specific compounds identified in claims 25 and 27. The Examiner points to the "laundry list" of possible moieties discussed in column 2, line 58 through column 4, line 26. It is important to note that as a broad matter, the disclosed list covers literally thousands of possible compounds. For example, the disclosed list conservatively covers over 23,000 possible combinations of groups Z, X1, and X2. As mentioned above, the CCPA

stated that a forest of "even 48" trees may not be fully supported as to each species. Surely, exploration of over 23,000 possibilities would be considered "undue experimentation." Even with Weber in hand, the skilled artisan would be required to test all of the possible permutations to determine that the dyes recited are valuable, let alone functional. Accordingly, the claimed compounds were not "in the possession of the public," as required by established case law.

In light of the above discussed case law, the Examiner is merely picking and choosing various moieties to arrive at the Applicant's claimed composition. The specific structures identified by the Examiner are not identified by the disclosure with the requisite degree of specificity. Although these moieties are listed within the "laundry list" of possible configurations, there is no further identification within the Weber specification that would suggest using the very specific combination of functional groups at the identified positions as depicted and claimed in claims 25 and 27. As in Ruschig, the Examiner has merely pointed to specific trees without even a remote indication or direction, i.e. blaze mark, which would lead one skilled in the art to choose the specific combination of substituent groups identified by the Examiner.

This situation is nearly identical to that of *In re Ruschig*, where the mere listing of a number of substituent groups was not considered a disclosure sufficient to provide enablement under 35 U.S.C. §112 for specific species. Based on the established case law discussed above, the large "laundry lists" of Weber cannot serve to enable each and every possible species which might be assembled from the given substituents listed. Therefore, as a non-enabling reference, Weber cannot be used to sustain a rejection under 35 U.S.C. §102. Therefore, Applicants respectfully request that the rejection of claims 25-27 be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe that claims 21-22 and 25-27 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be addressed during a telephone interview, the Examiner is invited to telephone Bradley Haymond of Hewlett-Packard at (541) 715-0159, so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 16 day of October, 2003.

Respectfully submitted,

M. Wayne Western
Attorney for Applicant
Registration No. 22,788

THORPE NORTH & WESTERN P.O. Box 1219 Sandy, Utah 84091-1219 (801) 566-6633

Correspondence to be sent to:
W. Bradley Haymond
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80528-9599
(541) 715-0159